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LONG-TERM UNEMPLOYMENT IN CANADA

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LONG-TERM UNEMPLOYMENT IN CANADA

INTRODUCTION

Long-term unemployment (defined here as a continuous spell of unemployment with a duration of more than 52 weeks) has been and continues to be a major contributor to high unemployment in many OECD countries. Although the incidence of long-term unemployment (hereafter referred to as LTU) in Canada pales in comparison to that in most major OECD countries, it nevertheless represents a serious problem and a significant development in the Canadian labour market, particularly during the period following the 1981-82 recession.(1) While their numbers are relatively small, averaging some 62,000 individuals or 5.7% of total unemployment in 1990, this group of unemployed individuals is thought to account for an overwhelmingly disproportionate share of total time spent unemployed.(2) Consequently, they account for a good deal of our unemployment.

It is not uncommon to witness an increase in unemployment duration during a downturn in the business cycle. As the economy returns to

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(1) Of 16 OECD countries, Canada had the fourth lowest incidence of LTU in 1987. In that year, some 9.2% of the unemployed in Canada were unemployed for a year or more. On the other hand, the incidence of LTU in Belgium or Spain, for example, was 68.9% and 56.6% respectively. A more extensive inter-country comparison of long-term unemployment can be found in: OECD, *Employment Outlook*, Paris, September 1988, Table 2.10, p. 73.

(2) Two studies - A. Hasan and P. De Brouker, "Duration and Concentration of Unemployment," *Canadian Journal of Economics*, Vol XV, No. 4., November 1982; and, Charles Beach and S. F. Kaliski, "The Distribution of Unemployment Spells: Canada, 1978-82," *Industrial and Labour Relations Review*, Vol. 40, No. 2, January 1987 - both identified significant concentrations of unemployment among a relatively small proportion of unemployed individuals experiencing long spells of unemployment.

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more normal levels of economic activity, a decline in the average duration of joblessness usually follows. However, following the 1981-82 recession, LTU increased, and despite signs of improvement since 1986, it remains quite high even after seven years of relatively strong real economic growth. By the end of the last decade, the proportion of individuals unemployed for more than one year was almost double that prior to the 1981-82 downturn. And in response to the 1990-91 recession the incidence of LTU appears to be on the rise once again. The upward trend in long-term unemployment represents a serious adjustment problem in the labour market and this has undoubtedly contributed to the upward trend in the non-accelerating-inflation rate of unemployment or NAIRU (i.e., the rate of unemployment that would be observed over the short-term which is consistent with a rate of inflation that is neither increasing nor decreasing). Therefore efforts to reduce LTU would bode well for reducing the long-term equilibrium rate of unemployment and thereby achieve, in conjunction with the objectives of the Bank of Canada, low rates of both unemployment and inflation.

THE DISTRIBUTION AND INCIDENCE OF LONG-TERM UNEMPLOYMENT

The underlying level of LTU in this country has unquestionably increased since the beginning of the last decade. In 1980, when the aggregate unemployment rate was 7.5%, some 3.7% of Canada's unemployed were unemployed for more than one year. For the same unemployment rate, LTU accounted for 6.6% of unemployment by the end of the decade. The relationship between the unemployment rate and the incidence of long-term unemployment throughout the period 1980-90 is presented in Chart 1 below. This hook-shaped configuration is a product of the asymmetrical relationship between changes in LTU's share of unemployment and the unemployment rate.(3) During the 1981-82 recession, changes in LTU's share of unemployment lagged well behind changes in the unemployment rate, as those

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(3) The depiction in Chart 1 is not unique; this has been the experience of many OECD countries. For a more in-depth overview of the dynamics associated with this relationship see: OECD, *Employment Outlook*, Paris, September 1987, p. 174.

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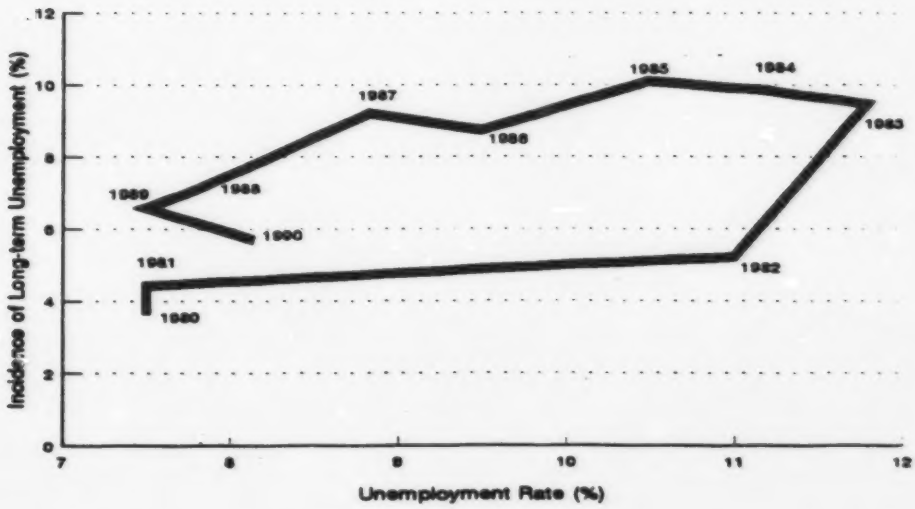
entering unemployment during this period had to remain unemployed for at least one year before joining the ranks of the long-term unemployed. Once the unemployment rate stabilized and began to decline, LTU's share of unemployment continued to increase, since most of those leaving unemployment were unemployed for less than one year. Three years after the economy regained its expansionist posture and the labour market began to tighten, the incidence of LTU finally began to decline. However, despite the return to pre-recession rates of unemployment, LTU's share of unemployment had almost doubled by the end of the decade. In fact, the equilibrium incidence of LTU appears to have jumped twice since the beginning of the last decade: once between 1980-81 and then again between 1981-89.

Chart 1
Relationship Between the Unemployment Rate and Long-term Unemployment



Source: Statistics Canada, CANSIM Division and the Library of Parliament.

A. Trends in the Age and Gender Composition of Long-term Unemployment

All age groups witnessed an increase in long-term unemployment in response to the 1981-82 recession. As clearly illustrated in

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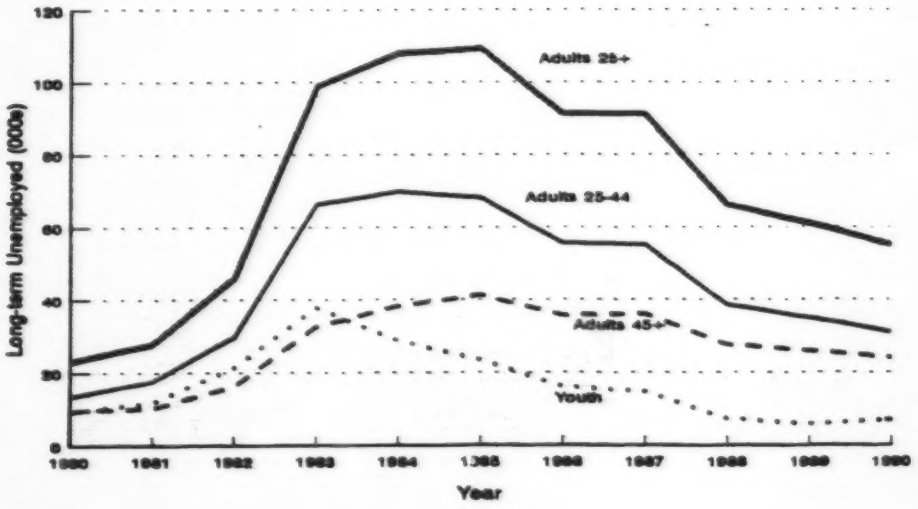
Chart 2, the greatest increases occurred among adults, particularly among prime age workers (i.e. those 25-44 years of age). The number of long-term unemployed youths peaked at 37,800 in 1983, four times the level of LTU among youths in 1980. Following an increase of similar magnitude, LTU among older workers (i.e. those 45 years of age and over) reached a maximum level of 41,200 in 1985; while LTU among prime age adults reached its worst point in 1984 at 69,800, five times greater than the number of long-term unemployed in this group at the beginning of the decade. By 1990, the age distribution of LTU had changed markedly from the beginning of the previous decade. During this period youths' share of long-term unemployment dropped from 28.6% to 11.3%. Adults witnessed an equivalent increase, with the most pronounced shift occurring among those 45 years of age and over.

Chart 2
Long-term Unemployment
By Age, Both Sexes



Source: Statistics Canada, CANSIM Division and the Library of Parliament.

Though not depicted in Chart 2, the number of adults experiencing very long-term unemployment (i.e. unemployment spells lasting 79 weeks or more) increased much more than the number with unemployment spells

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lasting 53-78 weeks. Throughout the period, 1980-90, the number of adults with an unemployment spell lasting between 53-78 weeks doubled, while the number of those experiencing spells of 79 weeks or more almost tripled. In the latter group, almost one-half of the increase was borne by older workers.

By 1990, the incidence of LTU among youths had actually declined to 2.1%, its second lowest level since the beginning of the 1980s. Despite the dramatic increase in long-term unemployment among prime age workers during the mid-1980s, the incidence (5.4%) of LTU among this group by the beginning of this decade was roughly the same as that recorded ten years earlier. Consequently, all of the increase in the incidence of long-term unemployment since the beginning of the last decade is solely attributed to the increase in the incidence of LTU among older workers. During this period, the incidence of LTU among this group more than doubled from 4.6% in 1980 to 11.2% in 1990. This finding coincides with the view that older workers typically face greater difficulties making adjustments in the labour market as they are usually less mobile; prone to long periods of job search; and, if necessary, are unlikely to make sufficient investments in human capital to find new employment.

The gender composition of LTU has also shifted since the beginning of the last decade. Following the 1981-82 recession, LTU among men and women increased dramatically, reaching highs of 92,300 for men in 1983 and 45,900 for women the following year. Despite the steady decline in LTU since, the number of long-term unemployed men and women in 1990 was 102% and 77% higher than their respective levels in 1980. Most of the increase (i.e. 75.7% for men and 59.4% for women) in LTU during this period occurred among those unemployed for periods lasting 79 weeks or longer.

In addition to having slower growth in LTU than men, women also witnessed a reduction in their share of LTU throughout this period; it declined from 38.5% in 1980 to 35.5% in 1990. Both sexes witnessed an increase in the incidence of LTU during this period: the incidence of LTU among men increased from 4.2% in 1980 to 6.5% in 1990, while the incidence of LTU among women increased from 3.2% to 4.4%.

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B. Regional Long-Term Unemployment

As illustrated in Chart 3, the regional distribution of LTU changed dramatically with the onset of the 1981-82 recession.(4) Although Quebec's share of LTU remained well above that of all other regions during the period 1980-90, its share of LTU declined from just over 50% in 1981 to 36.8% in 1984 and increased steadily thereafter. The Atlantic region's share of LTU declined somewhat following the recession and remained around 10% until the end of the last decade. Between 1980-86, Ontario's share of LTU declined steadily and has hovered around 14% since. The most dramatic change in the regional distribution of LTU during this period occurred in the West. Western Canada's share of LTU increased rapidly during the recession and well into the recovery, rising from 8.1% in 1981 to 35.1% in 1988. While the proportion of long-term unemployed individuals in this region has since declined, it remains very high relative to pre- and post-recession shares of LTU in other regions of the country.

In 1980, the incidence of LTU in Atlantic Canada, Quebec, Ontario and the West was 4.7%, 5.1%, 3.1% and 1.9% respectively. Ten years later it was up to 5.9% in the Atlantic region, while Ontario witnessed a marginal decrease to 3.0%. Quebec and the West, on the other hand, experienced significant increases during this period as the incidence of LTU reached 8.4% and 5.0% respectively by 1990. In both cases, these increases were, once again, largely due to increases in the incidence of very long-term unemployment. More than 90% of the increase in the incidence of LTU in Quebec during this period was attributed to an increase in the incidence of those unemployed for 79 weeks or more, while this group accounted for 71% of the increase in Western Canada.

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(4) In fact, the distribution of regional LTU became more concentrated (or less equally distributed) throughout the period 1980-90. One common measure of concentration, derived from the Lorenz curve, is called the Gini coefficient. The value of this coefficient ranges from zero to one, the latter representing the highest degree of concentration. Between 1980 and 1990, the value of the Gini coefficient increased from 0.32 to 0.42. Since the Lorenz curves for each of these periods do not intersect, we can conclude with certainty that regional LTU became less evenly distributed during this period.

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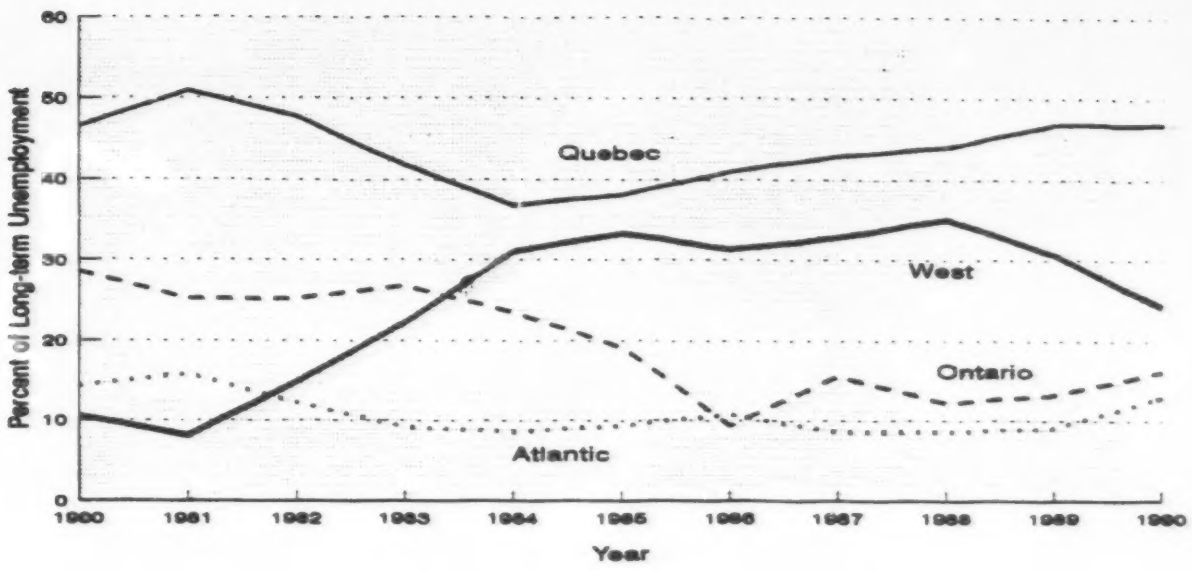
Chart 3
Regional Distribution of Long-term Unemployment



Source: Statistics Canada, CANSIM Division and the Library of Parliament.

C. Sectoral Long-Term Unemployment

Unfortunately, sectoral LTU data covering the period 1980-90 are only complete for three industries: manufacturing, trade and services. Estimates of LTU in the construction industry are available for the period 1982-90, while the number of long-term unemployed in public administration are only available for the period 1982-89. Estimates for all other industries (i.e. primary; transportation, communications and other utilities; and finance, insurance and real estate) are not available for most years as these data are too unreliable and not published by Statistics Canada.

As depicted in Chart 4, all industries, save the seemingly recession-proof public administration sector, experienced rapid increases in LTU following the onset of the 1981-82 recession. The most dramatic increase appeared to take place in the manufacturing industry where the

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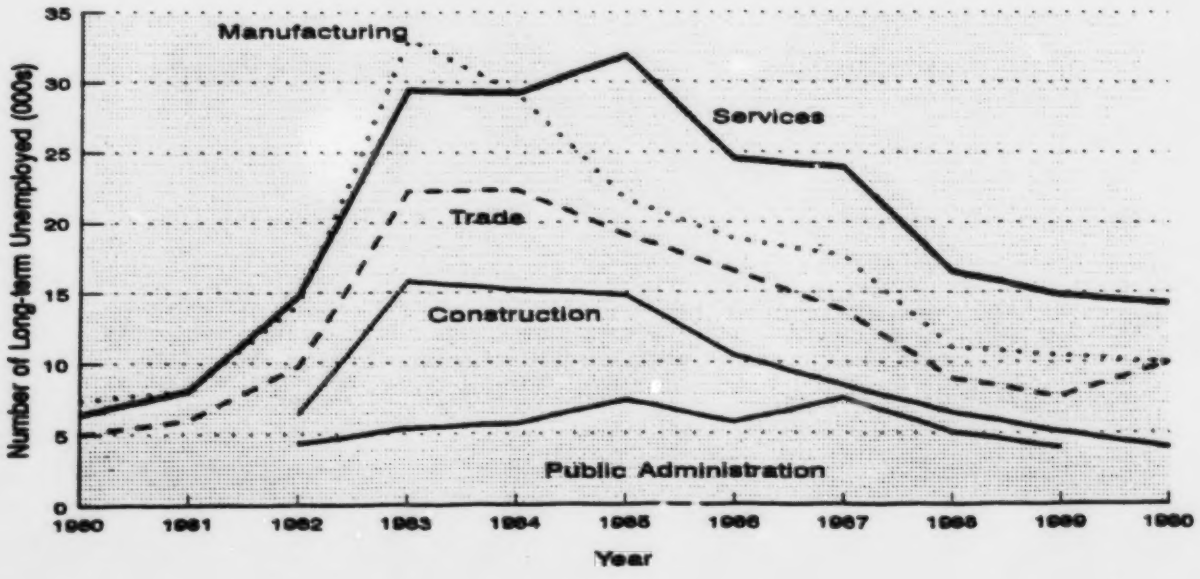
number of long-term unemployed individuals increased by more than 300% between 1981-83. Although sectoral LTU declined steadily throughout most of the recovery, by 1990 the number of long-term unemployed individuals in all three industries for which data are available remained well above their pre-recession levels. This is especially true for the services industry as the level of LTU in 1990 was more than double that of ten years earlier. Despite this increase, the services industry's share of LTU has remained fairly constant over the past ten years, increasing marginally from 19.5% in 1980 to 22.6% in 1990. The proportion of LTU in manufacturing industries declined steadily throughout the entire period 1980-90. The same trend was witnessed for trade during the period 1980-89, though, after declining to 11.4% in 1989, the proportion of LTU in this industry shot up to 16.1% in the following year.

Chart 4
Long-term Unemployment By Industry



Source: Statistics Canada, CANSIM Division and the Library of Parliament.

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The characteristics of the long-term unemployed presented above have many similarities with those found in a survey conducted by Statistics Canada in January 1986. According to the survey, some 998,000 full-time workers (between the ages of 20 and 65) experienced permanent job losses between 1981-84. Of these, approximately 12% experienced joblessness for 53 weeks or more. A little more than one-half these individuals found full-time employment sometime between 1981 and 1985. More than three-quarters of this subgroup were men; 32% were from the province of Quebec, which had the largest share of any province; almost 30% were 45 years of age or more; and, almost 40% had not completed secondary school. The remaining long-term unemployed (i.e. 55,000 individuals) were still searching for work in January 1986, after having experienced joblessness for between one and four years. Those overrepresented in this group included people 45 years of age and over, those with only an elementary school education, residents of Quebec and service workers.(5)

CAUSES OF LONG-TERM UNEMPLOYMENT

Theoretically, wages respond to supply and demand conditions in the labour market. If the demand for labour exceeds supply, wages are bid up as employers attempt to add more workers to their payrolls. Conversely, if the supply of labour exceeds demand, idle workers bid wages down in an effort to secure employment and employers hire more workers because it is profitable to do so. In the end, and in the absence of market imperfections, wages respond so as to equilibrate the number of individuals willing to supply their labour and the amount of labour demanded. This depiction of the labour market necessarily permits brief periods of unemployment as labour supply and demand adjust to changing conditions in both labour and output markets: workers looking for employers and employers looking for workers need time to gather information in order

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(5) Garnett Picot and Ted Wannell, "Job Loss and Labour Market Adjustment in the Canadian Economy," *The Labour Force*, Minister of Supply and Services, Ottawa, March 1987, p. 97.

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to make their respective decisions. Consequently, adjustments to excess demand or supply are not realized instantaneously.

LTU does not exist in the type of labour market depicted above as the period of adjustment (i.e. the duration of an unemployment spell) is relatively brief. In reality, however, labour market adjustments are not so brief, as evidenced by equilibrium levels of unemployment above that attributed to the usual frictional causes. Structural factors also contribute in this regard and these serve to impede adjustments between supply and demand and thereby generate longer periods of joblessness. Recent evidence indicates that a great deal of present-day unemployment can be attributed to a failure of the labour market to adjust to supply and demand side shocks.(6) Many factors lie behind the upward trend in LTU, undoubtedly similar in many respects to those which explain the upward trend in equilibrium unemployment generally (e.g. industrial restructuring, economic shocks, institutional changes, etc.,). However, it is the adjustment process, or more appropriately the lack of adjustment in the case of LTU, which determines directly the duration of unemployment spells in the labour market. Two determinants - structural mismatches between labour supply and demand (e.g. workers possess inadequate skills or are geographically removed from job openings) and real wage inertia (i.e. insufficient real wage adjustments) - are considered to be major contributors in this regard. Unfortunately, however, empirical evidence concerning the direct impact of both factors on unemployment duration is limited at best.

There is no question that the precipitous decline in aggregate demand during the 1981-82 recession served to raise the duration of unemployment over the short-term. However, the economy did not experience a prolonged period of demand deficiency as evidenced by the sustained period of relatively strong real economic growth between 1983-89. And, as

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(6) For example, see Herbert Grubel and Josef Bonnici, *Why is Canada's Unemployment Rate So High?* The Fraser Institute, Vancouver, 1986; John McCallum, "Unemployment in Canada and the United States," *Canadian Journal of Economics*, XX, No. 4, November 1987; and Andrew Burns, "Unemployment in Canada: Frictional, Structural and Cyclical Aspects," Economic Council of Canada, Working Paper No. 1, 1990.

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indicated above, the underlying level of LTU increased despite a return to pre-recession rates of unemployment. While demand deficiency may have had a more lasting impact on unemployment duration in some regions of the country, at the aggregate level structural factors appear to be more important in explaining the upward trend in the incidence of LTU.

A. Structural Mismatches

Structural mismatches of the type referred to here stem primarily from changes in aggregate or sectoral demand for output, which in turn affect the demand for labour. These demand-side shocks are thought to increase the geographical distance between available jobs and qualified workers, and/or reduce the degree of compatibility between available skills and those in demand. Failure to move to areas which offer an opportunity for employment or to acquire skills in demand can leave the unemployed in a labour market where search is ineffective and the duration of unemployment is long. This is especially true if long duration unemployment depreciates individuals' skills to the extent that employers are reluctant to hire them (i.e. ranking) or it decreases job search effectiveness or intensity.(7) In terms of the latter, workers can become more discouraged the longer they remain unemployed and less willing to extend their search beyond their local labour market, especially if the direct costs of unemployment are lowered through income support payments.(8)

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(7) Despite robust economic growth over the latter half of the 1980s, a recent study suggests that the severity of the 1981-82 recession may have contributed to high levels of LTU for both of these reasons. See Syed Sajjadur Rahman and Surendra Gera, "Long-Term Unemployment: The Canadian Experience," Economic Council of Canada, Working Paper No. 12, 1990, p. 28-32.

(8) The type of search unemployment considered in this instance is not the same as that usually associated with frictional unemployment. In reality, this type of unemployment is structural in nature, as search is artificially extended because the cost of search has declined and may eventually be rendered ineffective because of ranking. The Unemployment Insurance Program is often cited as one form of income support which can extend job search and reduce its effectiveness, particularly in high unemployment regions. Under the program, insured workers are required to garner a certain number of weeks of (cont'd)

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Since the beginning of the last decade, especially the early 1980s, a great deal of attention has been paid to assessing the extent of structural mismatches in the Canadian labour market. For example, in a 1981 review of future labour market developments, Employment and Immigration Canada projected an increase in occupational imbalances in manufacturing and construction trades and highly qualified occupations over the latter half of the 1980s.(9) Relying on the information contained in briefs and testimony presented to it, the Parliamentary Task Force on Employment Opportunities for the '80s reported actual and projected occupational imbalances for a number of occupations and regions.(10) The Economic Council of Canada attempted to document the extent of labour market imbalances through a nationwide survey of businesses conducted in early 1980. Some 49% of respondents experienced hiring difficulties between 1977-79 and 43% anticipated further hiring difficulties between 1980-84. Anticipated

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insurable employment (depending on regional unemployment rates) to be entitled to benefits. In addition, the duration of benefits also depends on regional unemployment rates. In most cases, for identical weeks of insurable employment, claimants in high unemployment areas receive more weeks of benefits than their counterparts in low unemployment areas. This not only encourages individuals to engage in less productive job search within their local labour market, but it also encourages them to stay in their local labour market rather than move to an area where jobs are more plentiful. If ranking does exist, these individuals may not receive any job offers even if they relocate once their claim terminates. Although one of the objectives of the recent amendments to the *Unemployment Insurance Act* was to reduce work disincentives, the duration of benefits for claimants residing in very high unemployment areas of the country were affected least. While these amendments may not appreciably alter the incidence of LTU, they are expected to lower the overall unemployment rate. One estimate suggests that the amendments dealing with entrance requirements and the duration of benefits could reduce the aggregate unemployment rate by as much as one-half of a percentage point (see M.W. Keil and J.S.V. Symons, "An Analysis of Canadian Unemployment," *Canadian Public Policy*, XVI:1, March 1990, p. 11-12).

(9) Employment and Immigration Canada, *Labour Market Development in the 1980s*, (A report of the Task Force on Labour Market Development prepared for the Minister of Employment and Immigration), Minister of Supply and Services, Ottawa, July 1981, p. 65-69.

(10) Canada, Parliament, House of Commons, Special Committee on Employment Opportunities for the '80s, *Work for Tomorrow: Employment Opportunities for the '80s*, Ottawa, October 1981, p. 44-45.

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shortage-related vacancies were expected to be most pronounced in processing, and managerial and professional occupations.(11) More recently, the Advisory Council on Adjustment noted in its report that some 14% of manufacturing firms were experiencing shortages of skilled labour in early 1988, while at the same time LTU exceeded 70,000 individuals.(12)

Changes in the relationship between the unemployment rate and the vacancy rate during the last decade also suggest the presence of structural mismatches. This relationship, known as the Beveridge curve, seems to have shifted upward during the last decade. As illustrated in Chart 5 on the following page, the relationship between the unemployment rate and the vacancy rate (proxied here by the Help Wanted Index)(13) clearly indicates that an outward shift (i.e. a higher vacancy rate is associated with a given unemployment rate, an indication that structural mismatches have worsened) occurred during the 1980s and this shift seems to be most pronounced in Atlantic Canada.(14)

One of the reasons for this shift could be due to the uneven sectoral and regional distribution of growth in labour demand and supply following the recession. In other words, during the recovery occupational imbalances worsened because of an increase in the degree of geographical and occupational mismatches between jobs and unemployed workers. For example, despite the considerable slack that developed in Western Canada's goods-producing industries between 1980-89, significant relative increases in unemployment in these industries (i.e. percentage change in unemployment in Western Canada's goods-producing industries expressed as a proportion of

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(11) Economic Council of Canada, *In Short Supply: Jobs and Skills in the 1980s*, Minister of Supply and Services, Ottawa, 1982, p. 37-41.

(12) Advisory Council on Adjustment, *Adjusting to Win*, Minister of Supply and Services, Ottawa, March 1989, p. 36.

(13) As the Job Vacancy Survey was discontinued in 1979, the only official source of vacancy-related information is the *Help Wanted Index* published by Statistics Canada.

(14) This observation is supported by the results of a study which concluded that most of the unemployment in the Atlantic region over the last decade was structural in nature (see Andrew Burns, "The Natural Rate of Unemployment: A Regionally Disaggregated Approach," Economic Council of Canada, Working Paper No. 2, 1990, p. 35).

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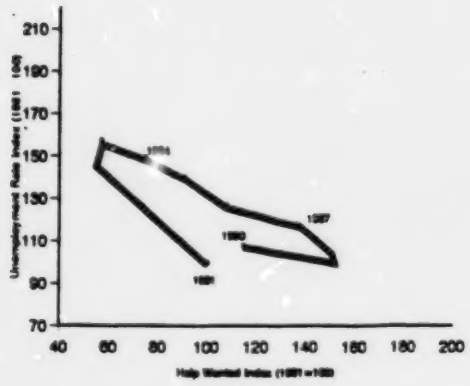
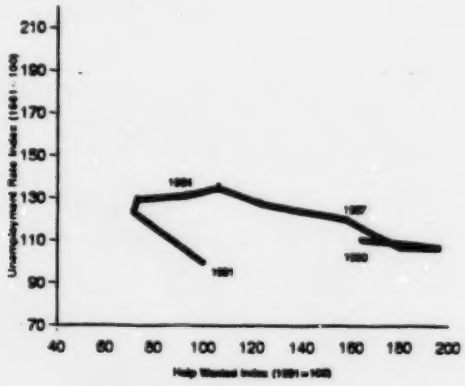
Chart 5
The Relationship between the Unemployment Rate and Help Wanted Indexes, 1980 - 1990
Canada and the Regions

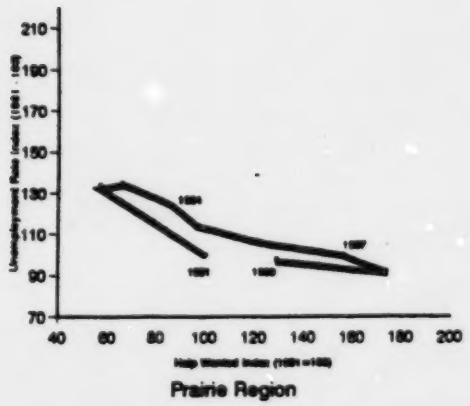
Canada



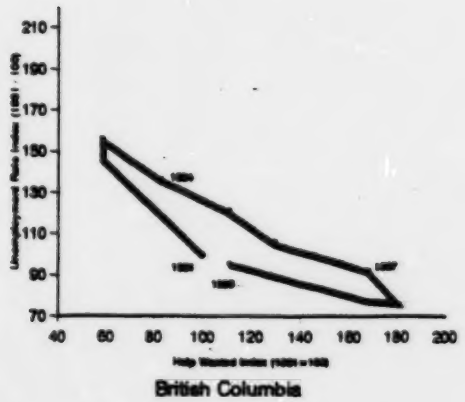
Atlantic Region



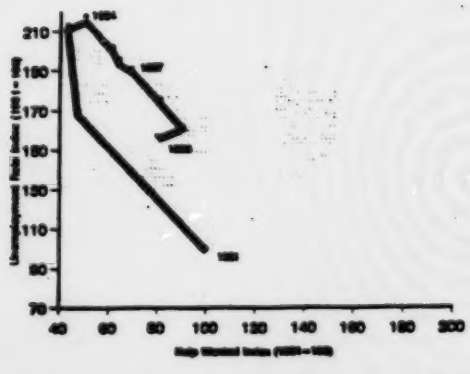
Quebec



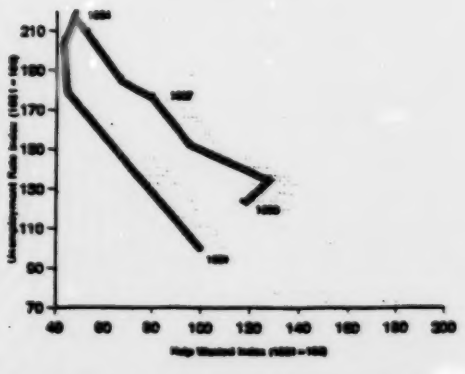
Ontario



Prairie Region



British Columbia



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the percentage change in total unemployment in these industries) persisted throughout the decade. Meanwhile, relative growth in sectoral demand for labour in Central Canada (primarily Ontario) was above average in most industries throughout this period. In addition, between 1980-89 Ontario experienced a relative decline in unemployment that was well above the increase in labour surplus witnessed for the country as a whole. Given the relative differences in regional labour market conditions during this period, one would expect to observe a growing proportion of out migration from the West headed to Central Canada, especially Ontario. However, data suggest that the opposite occurred, as the proportion of interprovincial migrants leaving the West for Ontario declined from around 30% in 1983-84 to 23% in 1989-90.(15)

Macroeconomic estimates of the upward trend in the natural rate of unemployment also suggest some worsening of structural mismatches between labour supply and demand during the last decade. Using a measure of employment dispersion, one study found that sectoral shifts in the demand for labour played a significant role in explaining both fluctuations in the aggregate level of unemployment as well as its upward trend.(16) Though critical of the approach followed in the aforementioned study, another study found corroborating evidence and concluded that a significant proportion of the increase in the natural rate of unemployment, especially during the first half of the last decade, was attributed to increased structural mismatches in the labour market.(17)

B. Real Wage Inertia

Real wage inertia has commanded a substantial focus among some economists attempting to explain the upward trend in unemployment.

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(15) Statistics Canada, *Postcensal Annual Estimates of Population by Marital Status, Age, Sex and Components of Growth for Canada and the Provinces*, Minister of Supply and Services, Canada, Volumes 3-8, Table 9 (Cat. 91-210).

(16) Lucie Samson, "A Study of the Impact of Sectoral Shifts on Aggregate Unemployment in Canada," *Canadian Journal of Economics*, XVIII, No. 3, August 1985.

(17) Burns, *Unemployment in Canada* (1990).

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Not surprisingly, this has produced competing theories, chief among which include union bargaining (explicit contracts) and efficiency wages.(18)

1. Explicit Contracts(19)

Unlike the unemployment resulting from implicit contracts (i.e. unwritten understandings between employers and employees that constant wages will be paid despite fluctuations in the demand for labour), the unemployment generated as a consequence of explicit contracts is involuntary (i.e. unemployed workers are willing to work for less than the going wage). Under explicit contracts, the wage determination process is void of uncertainty as workers' wages are guaranteed over the life of the contract (and usually contain some mechanism for adjustments to the cost of living). Consequently, employers resort to quantity adjustments over the life of the contract in response to changing business conditions. While one would expect competitive pressures to reduce real labour costs in subsequent contract periods, proponents of this view of the labour market maintain that these pressures are neutralized by unions, whose interests mirror the majority of the membership. Bargaining positions that call for higher wages, though these may mean a reduction in membership, are usually the most appealing to the majority of workers, especially those with

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(18) For a brief review see: Grubel and Bonnici (1986) and Janet L. Yellen, "Efficiency Wage Models of Unemployment," *The American Economic Review*, Vol. 74, No. 2, May 1984, p. 200-205.

(19) Another approach involving the notion of agreements between employers and employees is called implicit contracts. The theoretical underpinning of this approach is based on a view of the labour market which depicts firms and workers as having an understanding (hence implicit contract) that fixed wages will be paid despite fluctuations in the demand for labour. In other words, firms and workers agree to eliminate uncertainty about future wage payments (though not employment) and short-term layoffs are the preferred adjustment mechanism over the period covered by the agreement. Firms and workers maintain these implicit agreements in order to minimize adjustment costs (e.g. search costs, firm-specific training costs, etc.). Unlike the situation pertaining to explicit contracts, layoffs in this instance are regarded as temporary and workers fully expect to be recalled once production returns to normal levels. Clearly, this approach is intended to explain the existence of cyclically unemployed workers waiting to be recalled, since it would not appear to be viable in a world where quantity adjustments are permanent.

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seniority. It is also argued that wage adjustments in the non-unionized segment of the labour market are also insulated from the competitive pressures of higher unemployment by the threat of unionization. If the union/non-union wage differential becomes too large, workers in the non-union sector of the labour market might organize to restore their relative wage.

2. Efficiency Wages

Efficiency wage theorists posit that in equilibrium firms may find it profitable to pay wages in excess of market clearing levels. In other words, it might be more profitable to ration jobs than to hire unemployed workers at a lower wage. While the potential profitability of paying above market clearing wages seems perverse, proponents of this view maintain that the impact of a higher real wage on labour productivity outweighs its impact on labour costs and thus raises profits. Wage offers are established at levels where profits are maximized (or conversely labour costs per unit of output or efficiency unit are minimized). Unlike the competitive labour market described at the outset of this section of the paper, wages do not fall in response to labour surpluses (unemployment) as firms have already determined wage levels that maximize profits. Any attempt to reduce the wage and hire more workers would reduce productivity and therefore profits.(20) Consequently, unemployed workers must wait for

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(20) Proponents of this view have identified several reasons for the positive relationship between productivity and wages. One view maintains that the payment of above market clearing wages increases the incentive for employees to work rather than shirk. Since higher wages raise the cost of unemployment (i.e. earnings are foregone if employees are caught shirking), workers will be less inclined to loaf on the job and risk being fired. A related view concerns the impact of higher wages on morale: satisfied workers are more loyal to the firm and are therefore more productive than lower paid, unsatisfied workers. Another view suggests that above market clearing wages enhances productivity by reducing labour turnover. The costs of operating without a full complement of workers as well as those associated with hiring and training replacements are largely foregone if by paying higher wages, firms can make their workers reluctant to quit. Finally, a fourth view suggests that higher wage offers attract more productive workers. Under this approach, called adverse selection, workers have at least some unobservable productivity differences which are positively correlated with wages.

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job openings to arise via attrition and/or increases in the demand for labour. In other words, once individuals become unemployed they could remain that way for a long time.

While proponents of real wage inertia have attempted to garner empirical support for their respective theories, it is extremely difficult to isolate the effect of real wage inertia on unemployment, let alone LTU; as both the demand for, and supply of, labour are constantly changing in response to many economic influences, including wages. With this in mind, Chart 6 depicts changes in total hourly compensation (in constant dollars) and the unemployment rate for non-public production during the period 1980 to 1990.

This chart clearly depicts a minimal amount of adjustment in real hourly compensation to significant changes in the unemployment rate. In fact, while the unemployment rate in the private sector remained well above its pre-recession rate throughout most of the period 1980-90, real wages continued to increase in each year save 1982, 1983 and 1985. Though not illustrated in the chart, real compensation gains were registered in both non-public goods and services production even though considerable levels of labour surplus prevailed during this period. In non-public goods production, real wage gains were registered in all but two years (1982 and 1983) throughout the period 1980-90, despite the fact that the unemployment rate in this sector was well above its 1981 level during most of this period. The trend in real compensation in non-public services production displayed even greater perversity throughout the last decade. Following an increase of almost 40% in this sector's unemployment rate in 1982, real wages increased by 0.2%. Further increases were registered in 1984 and throughout the period 1986-90, despite the presence of above pre-recession rates of unemployment and at least a twofold increase in the long-term unemployment rate. Although the exact contribution of real wage rigidity to LTU is uncertain, it seems reasonable to suggest that real wage inertia has played an important role in lengthening the unemployment spells of many individuals during this period.

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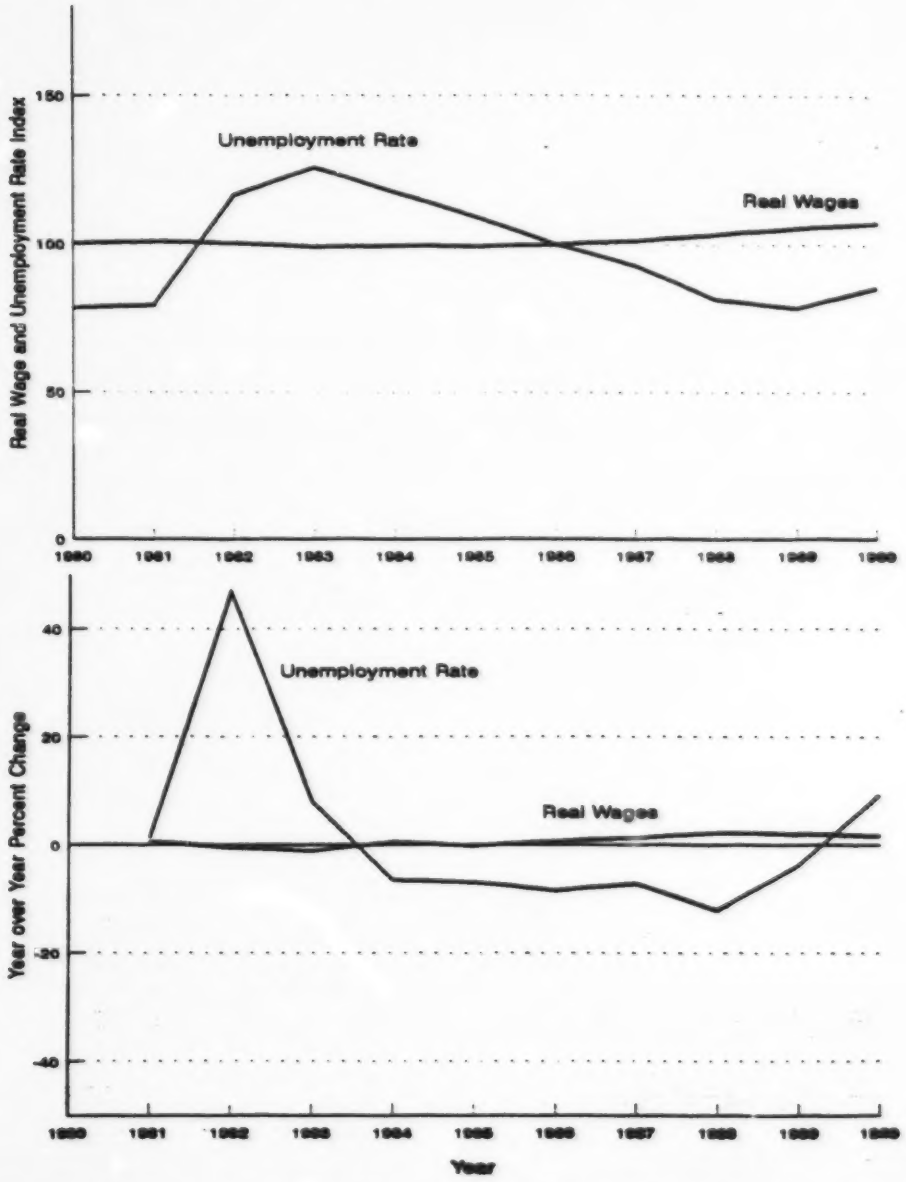
Chart 6
Trends in Real Hourly Compensation and Unemployment, Total Business Sector, 1980 - 1990



NOTE: The business sector refers to all industries in non-public production (i.e., excluding households, universities, hospitals and government). The unemployment rate excludes public administration.

Source: Statistics Canada, CANSIM Division and the Library of Parliament.

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FEDERAL LONG-TERM UNEMPLOYMENT POLICY

Introduced in 1985 as a component of the Canadian Jobs Strategy, the Job Development Program continues to be the government's main policy instrument for addressing the problem of LTU. Although the program actually comprises four options, the two main ones are General Projects and Individually Subsidized Jobs (the others are Delivery Assistance and Direct Training Purchases). The prime objective of this program is to provide training and work experience to individuals who have experienced unemployment for 24 of the last 30 weeks. It should be noted that a small proportion of participants in any given region may be exempt from this requirement. Each position created under the program, save those created for "employment-disadvantaged" participants, must be incremental and must usually last for a period of between 16 and 52 weeks. Employers are paid wage subsidies (60% of participants' wages in the case of for-profit employers and 100% in the case of not-for-profit employers) up to a maximum of $300 per week and receive additional financial assistance to cover other training and overhead costs. Although it would seem from the above that the Job Development Program attempts to address the problem of LTU by focusing on structural mismatches in the labour market, in reality it is sometimes used as a vehicle to provide income support via job creation projects. Throughout the period September 1985 to September 1987, the average duration of training/work experience projects was somewhere between 22-32 weeks in the case of General Projects and 21-30 weeks for Individually Subsidized Jobs.(21) In Newfoundland, for example, the average duration of training/work experience projects under General Projects was 13 weeks, hardly long enough to provide long-term structurally unemployed individuals with the necessary skills to become re-employed.

In concert with the downward trend in long-term unemployment, both current and constant dollar expenditures on the Job Development Program have declined steadily since its first complete year of

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(21) Goss, Gilroy and Associates Ltd., *Evaluation of the Job Development Program*, prepared for Employment and Immigration Canada, August 1989, p. 40.

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operation. Constant dollar expenditures on this program totalled approximately $834.1 million in 1986-87. By 1990-91, total expenditures stood at $371.9 million, a decline of approximately 20% per year. On a per capita basis (i.e. per program participant), constant dollar expenditures during this period increased to a high of $5,192 in 1987-88 and declined steadily thereafter to $4,952 in 1990-91. Since the program's inception, regional expenditures, save those in Quebec and Ontario, have remained relatively stable. In 1986-87, Quebec commanded almost 34% of the Job Development budget, while Ontario's share was around 24%. By 1990-91, Quebec's share had risen to 37.8 % and Ontario's had fallen to 14.7%, despite an increase in the regional share of LTU in both provinces during this period (see Chart 3).

An evaluation of the Job Development Program was completed in 1989. This evaluation is based primarily on a sample of individuals who participated in the program between September 1985 and September 1987. According to the evaluation, the program focused disproportionately more on youth and less on older workers relative to their respective shares of long-term unemployment. In addition, program participants with the least amount of education (i.e. grade 0-8) were underrepresented in comparison to this group's share of long-term unemployment.(22) Although most of the participants in the program were unemployed for 24 of the last 30 weeks prior to participation, the evaluation failed to specify the extent to which the program addresses the needs of the long-term unemployed as defined in this paper.

The General Projects and Individually Subsidized Jobs options (Direct Training Purchases and Delivery Assistance options were not evaluated) were primarily assessed according to the program's impact on participants' employability, earnings and UI utilization following participation in the program. Estimates of expected hours worked among participants in the General Projects option indicated that male participants worked an estimated 592.1 fewer hours per year as a result of the program (compared to estimates of what they would have worked in the

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(22) *Ibid.*, p. 35-8.

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absence of program participation), while female participants realized an estimated increase of 292.1 annual hours of work. In terms of the Individually Subsidized Jobs option, male and female participants realized estimated gains respectively of 109.1 and 265.6 hours of work per year as a result of the program. For the most part, it would appear that participation in the program resulted in a drop in estimated weekly earnings compared to that which individuals might have earned in the absence of program participation. Expected weekly earnings following participation in the General Projects option were $184 less for men and $13 less for women, while women who participated in the Individually Subsidized Jobs option witnessed an estimated decline of $17 in their weekly earnings. Male participants in the Individually Subsidized Jobs option were the only ones to realize a gain in estimated weekly earnings compared to estimated earnings in the absence of participation in the program. Probably the most disconcerting finding of the evaluation is the estimate that all participants, irrespective of the option, spent substantially more time on UI than would have been the case in the absence of program participation.(23)

Although the Job Development Program has undoubtedly been beneficial for some sub-groups and appears to have achieved some sub-objectives (e.g. increased private sector participation, met equity group targets, etc...), given its cost and its impact on the UI Program it is not at all clear that the program's primary options conferred a net benefit to a majority of program participants or to the country generally between September 1985 to September 1987.

CONCLUSION

Over the period 1980-90, the demographic, regional and sectoral characteristics of LTU changed dramatically. Throughout this entire period the proportion of LTU among adults, especially those 45 years of age and over, steadily increased; while the proportion of LTU among

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(23) *Ibid.*, p. 83.

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youths declined. Undoubtedly linked in part to the recession's disproportionate impact on men, men witnessed larger increases in LTU than women during this period. In addition, the regional distribution of LTU became less equal. While Quebec maintained the highest share of LTU throughout the entire period, Western Canada's share more than doubled between 1980-90. Sectorally, trade and services experienced the greatest increases in long-term joblessness during this period.

Today, the underlying level of LTU is substantially higher than a decade ago, aided in large part by an increase in the incidence of very long-term unemployment. Many factors undoubtedly contributed to this development, including increased structural mismatches between workers' skills and those in demand and inadequate wage adjustments. While there is little doubt that a significant reduction in LTU would appreciably lower Canada's unemployment rate, it would appear that federal initiatives in this area need to become more effective and probably better targeted if this is to be realized.

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